

INTERNATIONAL SEARCH REPORT

International Application No
PCT/CA2004/001027

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12C11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, FSTA, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| X | DE 198 28 688 A (STEINECKER MASCHF ANTON) 29 July 1999 (1999-07-29) column 8, line 20 - column 9, line 19 | 1-8 |
| X | DATABASE WPI Section Ch, Week 197509 Derwent Publications Ltd., London, GB; Class D16, AN 1975-15488W XP002303873 -& SU 423 839 A (SEVEROV B P) 3 September 1974 (1974-09-03) abstract | 1-8 |
| A | WO 00/78916 A (VAA SVEN DYRE ; GELEFF SVEND (DK); PEDERSEN KNUD SOENDERGAARD (DK); UN) 28 December 2000 (2000-12-28) claims 1-3 | 1,2 |

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

4 November 2004

Date of mailing of the international search report

19/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Rinaldi, F

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| DE 19828688 | A | 29-07-1999 | DE 19828688 A1 | 29-07-1999 |
| | | | AU 2518699 A | 09-08-1999 |
| | | | WO 9937748 A1 | 29-07-1999 |
| | | | EP 1049764 A1 | 08-11-2000 |
| SU 423839 | A | 15-04-1974 | SU 423839 A1 | 15-04-1974 |
| WO 0078916 | A | 28-12-2000 | AU 5209100 A | 09-01-2001 |
| | | | WO 0078916 A1 | 28-12-2000 |

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| | | | |
|---|--|--|--|
| Applicant's or agent's file reference 6.30.3128. PCT/CA | | FOR FURTHER ACTION See Form PCT/PEA/416 | |
| International application No. PCT/CA2004/001027 | International filing date (day/month/year) 13.07.2004 | Priority date (day/month/year) 16.07.2003 | |
| International Patent Classification (IPC) or national classification and IPC C12C11/00 | | | |
| Applicant LABATT BREWING COMPANY LIMITED et al. | | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | | |
| Date of submission of the demand 15.02.2005 | | Date of completion of this report 18.08.2005 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | | Authorized Officer Rinaldi, F Telephone No. +49 89 2399- | |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/CA2004/001027

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-6 as originally filed

Claims, Numbers

1-8 as originally filed

Drawings, Sheets

1/1 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/CA2004/001027

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|-------|
| Novelty (N) | Yes: Claims | 3-7 |
| | No: Claims | 1,2,8 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-8 |
| Industrial applicability (IA) | Yes: Claims | 1-8 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

- 1 The following document is referred to in this communication:
- D1: DE 198 28 688 A (STEINECKER MASCHF ANTON) 29 July 1999 (1999-07-29)
- D2: DATABASE WPI Section Ch, Week 197509 Derwent Publications Ltd., London, GB; Class D16, AN 1975-15488W XP002303873 -& SU 423 839 A (SEVEROV B P) 3 September 1974 (1974-09-03)

Novelty

- 2 The subject matter of independent process claims 1 and 2 and of thereof depending claim 8 does not fulfill the requirements of Art.33(2) PCT. D1 discloses suppressing formation of foam in wort by closing valve 24 thus allowing CO₂ generated during the fermentation to build up a pressure above the wort such that the foam is squashed. The valve is kept closed until the foam is reduced i.e. decayed and then reopened. Working below the maximum pressure which the brewing vessels can handle is regarded to be implicitly disclosed. Repeating the above steps is implicitly disclosed as the control unit will repeat the cycles whenever necessary i.e. as desired (col.8 l.20-col.9 l.19). The process is disclosed in the context of a primary fermentation.

Inventive step

- 3 The subject-matter of independent method claims 1 and 2 and of the thereof depending claims 3-8 does not fulfil the requirements of Art.33(3) PCT.
- 3.1 In view of the disclosure of D1, the subject-matter presently claimed appears to be trivial. In particular, collecting CO₂ is usually implemented in brewery. Similarly, optimising the pressure in the vessel is considered to be merely a measure of routine rather than of inventive skills.
- 3.2 D2 discloses defoaming by aid of repeated cycles of applying pressure and decompression such that foam is reconverted to a liquid. What is not unambiguously disclosed in D2 is that the foam volume reaches a maximum and decays. This is not considered to provide any unexpected effects and it is seen as an obvious measure.

Re Item VII

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

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Certain defects in the international application

- 1 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D2 is not mentioned in the description, nor are these documents identified therein.
- 2 The unit of the pressure "psig" (claims 2-5 and throughout the description) is not additionally expressed in terms of the metric system as stipulated by R.10.1a) PCT.

Re Item VIII

Certain observations on the international application

- 1 The pressure ranges disclosed in claims 2-5 are mostly below atmospheric pressure. It is unclear in as far such values can be defined as increased pressure (Art.6 PCT).